

Claims

1. Parking aid for a motor vehicle having a vehicle steering with a manual steering wheel and a steering torque regulating module by means of which a steering torque can be applied to the steering wheel, characterized in that the parking aid cooperates with the steering torque regulating module and an additional steering torque is applied to the steering wheel, supporting the driver of the vehicle in a parking procedure.
2. Parking aid according to Claim 1, characterized in that the additional steering torque applied to the steering wheel generates at least one artificial steering stop, preferably one or two steering stops.
3. Parking aid according to Claim 1 or 2, characterized in that the driver is guided by the additional steering torque applied to the steering wheel in his steering maneuvers in the parking procedure in the parking maneuver.
4. Parking aid according to any one of Claims 1 through 3, characterized in that the steering torque (steering assist torque) applied to the steering wheel is limited as a function of a steering work applied by the driver or a quantity depending thereon.
5. Parking aid for a motor vehicle having a vehicle steering with a manual steering wheel, characterized in that the parking aid has means for applying at least one steering stop, preferably one or two steering stops, by which the driver is guided in his steering maneuvers in the parking maneuver.

6. Steering torque regulating module for a motor vehicle having a steering system, in particular for a parking aid according to any one of Claims 1 through 5, characterized in that the changes in the restore torques of the steering applied as a function of the steering angle are determined and an additional steering torque (steering assist torque) is applied to the steering wheel, taking into account the changes in the restore torques by means of which the driver of the vehicle is supported in his parking maneuver.
7. Steering torque regulating module according to Claim 6, characterized in that the additional steering torque applied to the steering wheel generates at least one additional steering stop, preferably one or two steering stops, and the driver is guided by the additional steering torque applied to the steering wheel in his steering maneuver in the parking procedure.
8. Steering torque regulating module according to Claim 6 or 7, characterized in that the steering torque (steering assist torque) applied to the steering wheel is variably adjustable as a function of a steering work applied by the driver or a quantity dependent thereon.
9. Steering torque regulating module according to any one of Claims 6 through 8, characterized in that the steering assist torque is reduced in the event of a faster operation of the steering wheel or a quantity depending thereon, i.e., a greater rate of rotation of the steering wheel.
10. Method of driver steering support, in particular for a parking aid according to any one of Claims 1 through 5 or a steering torque regulating module according to any one of Claims 6 through

- 9, characterized in that the method supports a driver of a vehicle in a parking maneuver by means of a steering torque applied to the steering wheel, whereby the driver is guided by an artificial steering stop and the steering torque (steering assist torque) applied to the steering wheel is limited as a function of the steering work applied by the driver or a quantity dependent thereon.
11. Driver recognition module for a motor vehicle, in particular for a parking aid according to any one of Claims 1 through 5 or a steering torque regulating module according to any one of Claims 6 through 9, or a method for driver steering support according to Claim 10, characterized in that the driver of a vehicle is identified by a measured steering torque against at least one artificial steering stop, preferably one or two steering stops which are generated by means of an additional steering torque applied to the steering wheel.
 12. Driver recognition module according to Claim 11, characterized in that the driver is identified by a measured steering angle within a rising steering torque of the artificial steering stop.
 13. Driver recognition module according to Claim 11 or 12, characterized in that the work required for a steering torque actuator, in particular an electric motor, is determined and a driver steering torque is determined on the basis of the work required by the steering torque actuator.
 14. Longitudinal dynamics control module for a motor vehicle, in particular for a parking aid according to any one of Claims 1 through 5 or a steering torque regulating module according to any one of Claims 6 through 9 or a method for driving steering

support according to Claim 10, characterized in that the speed of the vehicle in maneuvering into a parking space is controlled by automatic braking intervention measures as a function of the position of the accelerator pedal.

15. Longitudinal dynamics control module according to Claim 14, characterized in that, when parking in a parking space, the speed of the vehicle is controlled by additional intervention into the engine torque of the drive engine of the vehicle as a function of the position of the brake pedal.
16. Longitudinal dynamics control module according to Claim 14 or 15, characterized in that when maneuvering into a parking space, the speed of the vehicle is controlled by additional intervention into the engine torque of the drive engine of the vehicle and by automatic gear-shifting of the vehicle transmission as a function of the position of the brake pedal.
17. Longitudinal dynamics control module according to any one of Claims 14 through 16, characterized in that the end of the parking space is detected, and the vehicle is automatically braked on reaching the end or shortly before reaching the end of the parking space.
18. Vehicle having an automotive steering system with a hand steering wheel and a steering torque regulating module and a parking aid, characterized in that the parking aid is assigned a steering torque regulating module according to any one of Claims 6 through 9, a driver recognition module according to any one of Claims 11 through 13 and a longitudinal dynamics control module according to any one of Claims 14 through 17.